

CLAIMS

What is claimed is:

1. An apparatus for preparing a nucleic acid component of a sample for amplification, comprising:
 - 5 a) a porous support including an agent that deactivates a nucleic acid amplification inhibitor component of a sample contacting the porous support;
 - b) a housing having an opening and defining an interior, said interior being in fluid communication with the porous support, whereby at least a
10 portion of a fluid directed through the opening is directed through at least a portion of the porous support and separates at least a portion of a nucleic acid component of a sample contacting the porous support from the support, thereby preparing the nucleic acid component for amplification; and
 - 15 c) separating means for separating the nucleic acid component from at least a portion of a sample and for depositing the nucleic acid component at the porous support which said separating means includes a magnetic substrate.
- 20 2. The apparatus of Claim 1, wherein said separating means comprise:
 - a) a vessel having an inlet at a first end and an outlet at a second end, distal to said first end;
 - b) an ampoule contained within the vessel, said ampoule containing magnetic beads;
 - 25 c) a valve at the second end of the vessel; and
 - d) a magnet at said valve.

3. The apparatus of Claim 2, wherein said separating means includes a buffer in said ampoule.
4. The apparatus of Claim 2, wherein the valve is rotatable, whereby magnetic beads held at one end of the valve can be moved to a second end of the valve
5 and thereby placed into contact with the porous support.
5. The apparatus of Claim 4, wherein the magnet is removable from the valve, whereby the magnetic beads can be attached to the magnet within the vessel while the valve is in one position, and while the valve is in a second position, the magnet can be removed and the magnetic beads released into contact with the
10 porous support.
6. The apparatus of Claim 5, further including a removable cap at the first end of the vessel.
- 7 The apparatus of Claim 5, wherein the magnet is positioned to attract the magnetic beads in the vessel in an upward direction.
- 15 8. The apparatus of Claim 1, wherein the housing is detachable.
9. The apparatus of Claim 1, wherein the magnetic substrate is coated with streptavidin.
10. A method for preparing a nucleic acid component of a sample for amplification,
20 comprising the steps of:
 - a) separating the sample from raw sample components through means that includes a magnetic substrate;

- b) contacting the sample with a porous support that deactivates a nucleic acid amplification inhibitor component of the sample; and
- c) directing a fluid through the porous support, whereby the nucleic acid component of the sample is directed through at least a portion of the porous support and is separated from said porous support, thereby preparing the nucleic acid component for amplification.
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11. The method of Claim 10, wherein the sample is separated from raw sample components by attaching the sample to a magnetic substrate, thereby removing raw sample components.
- 10 12. The method of Claim 11, wherein the magnetic substrate is in the form of magnetic beads.
13. The method of Claim 10, wherein the magnetic substrate is coated with a hydrophobic material.
14. The method of Claim 10, wherein the magnetic substrate is coated with a hydrophilic material.
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15. The method of Claim 10, wherein the magnetic substrate is coated with silicon dioxide.
16. The method of Claim 10, wherein the magnetic substrate is coated with streptavidin.
- 20 17. The method of Claim 10, wherein the magnetic substrate attaches a sample that includes spores, vegetative bacterial cells, DNA or a combination thereof.

18. The method of Claim 10, wherein the porous support includes a deactivating agent that deactivates the nucleic acid amplification inhibitor component of the sample, said deactivating agent being a chaotropic salt.
- 5 19. The method of Claim 10, wherein at least a portion of the raw components are caused to settle by gravity.
20. The method of Claim 10, wherein the nucleic acid component is stored in the housing.
21. The method of Claim 20, further comprising archiving the nucleic acid component in the housing.